# Annual Drinking Water Quality Report (covering calendar year 2011) Town of Hurlock Water Supply (Public Water System ID# 0090005)

The primary sources of Hurlock's drinking water are two underground aquifers. An aquifer is best described as an underground river, that is tapped by drilling a well and pumping the water to the surface for treatment.

Our water is pumped from two wells we refer to as wells three and four. Well number three pumps from the Pleistocene Aquifer and is approximately one hundred ten (110) feet deep. Well number four pumps from the Piney Point Aquifer and is approximately four hundred eighty (480) feet deep. We use chlorine gas for disinfection and we add granular soda ash for Ph adjustment.

In an effort to protect the Town's water supply, we have established a Wellhead Protection Area around the pumping station that supplies the majority of the Town's water. The larger the acreage of the protection area, the better protected the water supply will be. It is the express desire of the Town to increase the acreage of the Wellhead Protection Area when feasible to do so.

A "Source Water Assessment" has been completed for the Hurlock Water Supply. The "Source Water Assessment" helps determine the Town's water supply's susceptibility to contamination from outside sources. If any of our customers wish to view a copy of the "Source Water Assessment", please contact the Town Office to make the necessary arrangements.

If you have any questions about this report, or concerns about your water utility, please contact Tony Gilliard at 410-943-4181. It is important to the Town of Hurlock that our residents be informed about their water utility. If you want to learn more, please attend any of the regularly scheduled Town Meetings. These meetings are held on the 2<sup>nd</sup> and 4<sup>th</sup> Monday each month, at 6:00 PM in the Hurlock Town Office located at 311 Charles Street in Hurlock, Maryland.

We are pleased to report that our drinking water quality satisfies all Federal and State requirements. The following report is provided in compliance with Federal Regulations. This Report outlines our finished drinking water.

#### **Definitions**

In the following table(s) you will find many terms and abbreviations you may not be familiar with. To help you understand these terms, we have provided the following definitions:

Non-detects (ND) - Laboratory analysis indicates that the contaminant is not present

<u>Parts per million (ppm) or Milligrams per liter (mg/l)</u> – one part per million corresponds to one minute in two years or a single penny in \$10,000.

<u>Picocuries per liter (pCi/L)</u> – picocuries per liter is a measure of radioactivity in water.

<u>Maximum contaminant level (MCL)</u> – The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available treatment technology available.

<u>Maximum contaminant level goal (MCLG)</u> – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>Action Level (AL)</u> – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

The Hurlock Water Supply routinely monitors for contaminants in your drinking water complying with Federal and State laws. The following tables show the results of our monitoring for the period January 1, 2011 thru December 31, 2011.

### Test Results

The Town of Hurlock tests for, as required by State and Federal regulations, over seventy five (75) possible contaminants in your drinking water. If you desire to view the entire list of contaminants we test for, please contact the Town Office.

#### **Unregulated Contaminant Detected**

The following contaminants were detected in the water. While we are required to test for numerous unregulated contaminants, there are currently no Federal or State guidelines regulating the amount of these contaminants. However, we are still required to report the detection of these contaminants.

| <u>Contaminant</u> | Level Detected | Unit of Measurement |
|--------------------|----------------|---------------------|
| Sodium             | 78.0           | ppm                 |

## **Detected Contaminants NOT in Violation of the MCL**

The Town did find some regulated contaminants present in the water system at levels well below the maximum allowable level (MCL) which is determined safe by the EPA. These contaminants are shown below, along with the MCL and the MCLG for each one detected.

| Contaminant                             | <u>Level</u><br><u>Detected</u> | <u>Unit of</u><br><u>Measurement</u> | <u>MCL</u> | MCLG | Likely Source of<br>Contaminant   |
|---|---------------------------------|--------------------------------------|------------|------|---|
| Fluoride                                | 0.44                            | ppm                                  | 4          | 4    | Erosion of natural deposits;<br>water additive which<br>promotes strong teeth   |
| Selenium                                | 0.003                           | ppm                                  | 0.05       | 0.05 | Erosion of natural deposits   |
| Barium                                  | 0.126                           | ppm                                  | 2          | 2    | Erosion of natural deposits   |
| Gross Beta                              | 7.2                             | pCi/L                                | 50         | 0    | Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as beta radiation |
| Radium 226<br>&Radium 228<br>(combined) | 0.8                             | pCi/L                                | 5          | 0    | Erosion of natural deposits   |
| Nitrate**                               | 5.3                             | ppm                                  | 10         | 10   | Runoff from fertilizer use, erosion of natural deposits   |
| TTHM (total trihalomethane)             | 0.0098                          | ppm                                  | 100        | n/a  | By-product of drinking water chlorination   |

<sup>\*\*&</sup>quot;Nitrate in drinking water at levels above 10ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask for advice from your health care provider. As a precaution, we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply, even when that level does not constitute a violation of the allowable standards."

#### Lead and Copper

| Contaminant | <u>Level</u><br><u>Detected</u> | <u>Unit of</u><br>measurement | <u>AL</u> | MCLG | <u>Likely cause of contaminant</u>                                       |
|-------------|---------------------------------|-------------------------------|-----------|------|--|
| Copper*     | 0.17                            | ррт                           | 1.3       | 1.3  | Leaching and gradual deterioration of household plumbing (copper pipes)  |
| Lead*       | 0.003                           | ppm                           | 0.015     | 0    | Leaching and gradual deterioration of household plumbing (solder joints) |

<sup>\*</sup>No site tested for lead and copper in 2011 exceeded the copper or lead action rules. 2011 was the last required testing date for lead and copper. Testing for copper and lead will be performed again in 2014.

<sup>&</sup>quot;If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Hurlock is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4793 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>."

We have learned through our monitoring and testing that some contaminants are present. The EPA has determined that your water is safe at these levels. To experience the health effects for many of the regulated contaminants, a person would have to drink two liters of water every day containing a contaminant at the MCL for a lifetime to have a one-in-a-million chance of developing adverse health effects caused by the contaminant.

The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep our water at or below the levels specified by law as being safe for consumption. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health risks can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general public. Immuno-compromised individuals, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/ AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/ CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

\*\*\*Complete copies of this Consumer Confidence Report are available free of charge at the Hurlock Town Office during normal business hours.

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